

## FACT SHEET

as required by LAC 33:IX.2411, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0065986; AI 19388; PER20060001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** City of Morgan City  
Wastewater Treatment Plant  
Post Office Box 1218  
Morgan City, Louisiana 70381
- II. **PREPARED BY:** Todd Franklin
- DATE PREPARED:** April 19, 2007
- III. **PERMIT ACTION:** reissue LPDES permit LA0065986, AI 19388; PER20060001  
  
LPDES application received: October 4, 2006  
  
EPA has not retained enforcement authority.  
  
Previous LPDES permit effective: September 1, 2002  
Previous LPDES permit expires: August 31, 2007

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the City of Morgan City.
- B. The permit application does not indicate the receipt of industrial wastewater. However, CCS, formerly Environmental Treatment Team, LLC, has expressed interest in discharging into the City of Morgan City. CCS has applied for an industrial user discharge permit from Morgan City.
- C. The facility is located at 2001 Young's Road in Morgan City, St. Mary Parish.
- D. The treatment facility consists of pre-aeration and grit removal followed by biological treatment (USMG oxidation ditches with extended aeration and intrachannel secondary clarification) followed by chlorination.
- E. Outfall 001

Discharge Location: Latitude 29° 41' 9" North  
Longitude 91° 11' 25" West

Description: treated sanitary wastewater

Design Capacity: 4.5 MGD

Type of Flow Measurement which the facility is currently using:

Combination Totalizing Meter / Continuous Recorder

**V. RECEIVING WATERS:**

The discharge is into Bayou Boeuf; thence into Bayou Shaffer; thence into the Atchafalaya River in Subsegment 010801 of the Atchafalaya River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The critical low flow (7Q10) of Bayou Boeuf is estimated to be 1,212 cfs. (See the attached memo from Baker to Franklin for more information concerning the critical low flow)

The hardness value is 135.54 mg/l and the fifteenth percentile value for TSS is 27.40 mg/l.

The designated uses and degree of support for Subsegment 010801 of the Atchafalaya River Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Full	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Full	Full	Full	N/A	N/A	N/A	N/A

<sup>1/</sup> The designated uses and degree of support for Subsegment 010801 of the Atchafalaya River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 010801 of the Atchafalaya River Basin, is listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which is listed as an endangered species. Since effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat, LDEQ has determined that the issuance of this LPDES permit is not likely to adversely affect the Pallid sturgeon or its aquatic habitats. As instructed by the FWS in a letter dated September 29, 2006, from Watson (FWS) to Brown (LDEQ), this fact sheet has been sent to the FWS for review and consultation.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible

for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII.**

**PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin  
Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX.**

**PROPOSED PERMIT LIMITS:**

Subsegment 010801, Lower Atchafalaya River-U.S. Hwy. 90 Bridge in Morgan City to Atchafalaya Bay, includes Sweetwater Lake and Bayou Shaffer, is not listed on LDEQ's Final 2004 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

**Final Effluent Limits:****OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD <sub>5</sub>	1,126	30 mg/l	45 mg/l	The discharge does not flow directly into the Atchafalaya River. However, due to the high critical flow of the receiving stream (1,212 cfs), limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size which discharge into the Atchafalaya River.
TSS	1,126	30 mg/l	45 mg/l	

**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C, the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

### Toxicity Characteristics

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD shall require biomonitoring at some frequency for the life of the permit or where available data show reasonable potential to cause lethality, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, September 27, 2001 VERSION 4).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC 33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0065986, **Biomonitoring Section** for the organisms indicated below.

#### TOXICITY TESTS

#### FREQUENCY

48 Hour Definitive Toxicity Test  
using Daphnia pulex

1/quarter<sup>1</sup>

48 Hour Definitive Toxicity Test  
using fathead minnow (Pimephales promelas)

1/quarter<sup>1</sup>

- <sup>1</sup> If there are no lethal effects demonstrated after the first year of quarterly testing, the permittee may certify fulfillment of the WET testing requirements in writing to the permitting authority. If granted, the monitoring frequency for the test species may be reduced to not less than once per year for the less sensitive species (usually *Pimephales promelas*) and not less than twice per year for the more sensitive species (usually *Daphnia pulex*). Upon expiration of the permit, the monitoring frequency for both species shall revert to once per quarter until the permit is reissued.

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 7%, 10%, 13%, 17%, and 23%. The low-flow effluent concentration (critical low-flow dilution) is defined as 17% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. According to the Implementation of State Standards, acute toxicity testing in addition to, or in lieu of, chronic toxicity testing may be imposed for discharges that have a critical dilution of five percent (5%) or less. An acute to chronic ratio has been applied in the calculations. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in the **Biomonitoring Section** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in the **Biomonitoring Section** of the permit.

The permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2383. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

**X. PREVIOUS PERMITS:**

LPDES Permit No. LA0065986: Effective: September 1, 2002

Expired: August 31, 2007

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	---	Report	Report	Continuous	Recorder
BOD <sub>5</sub>	1,126	30 mg/l	45 mg/l	1/week	6 Hr Comp
TSS	1,126	30 mg/l	45 mg/l	1/week	6 Hr Comp
Fecal Coliform					
Colonies/100 ml	---	200	400	1/week	Grab
pH	Range (6.0 su – 9.0 su)			1/week	Grab
Biomonitoring					
<i>Pimephales promelas</i>	---	Report	Report	1/year	24 Hr Comp
<i>Daphnia pulex</i>	---	Report	Report	1/year	24 Hr Comp

The permit contains biomonitoring.

The permit contains pollution prevention language.

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates the following most recent inspection performed for this facility.

Date – June 6, 2006

Inspector - LDEQ

Findings and/or Violations –

1. Permit – On site and up to date.
2. Records / Reports – Sampling and reporting is being done as required.
3. Effluent – Clear
4. O&M – Plant appeared to be operating properly at the time of the inspection. Inflow and Infiltration does cause hydraulic overloads at the plant during rain events.

**B) Compliance and/or Administrative Orders**

A review of the files indicates that no recent enforcement actions have been administered against this facility.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning July 2004 through September 2006 has revealed no effluent violations.

**XII. ADDITIONAL INFORMATION:**

LDEQ reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future. Additional limitations and/or restrictions are based upon water quality studies and can indicate the need for advanced wastewater treatment. Water quality studies of similar dischargers and receiving water bodies have resulted in monthly average effluent limitations of 5mg/L CBOD<sub>5</sub> and 2 mg/L NH<sub>3</sub>-N. Prior to upgrading or expanding this facility, the permittee should contact LDEQ to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 4.5 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD}_5: 8.34 \text{ gal/lb} \times 4.5 \text{ MGD} \times 30 \text{ mg/l} = 1,126 \text{ lbs/day}$$

The Monitoring Requirements, Sample Types, and Frequency of Sampling shall be as follows:

<u>Effluent Characteristics</u>		<u>Monitoring Requirements</u>	
		<u>Measurement</u>	<u>Sample</u>
		<u>Frequency</u>	<u>Type</u>
Flow		Continuous	Recorder
BOD <sub>5</sub>		1/week	6 Hr. Composite
Total Suspended Solids		1/week	6 Hr. Composite
Fecal Coliform Bacteria		1/week	Grab
pH		1/week	Grab
Biomonitoring	<u>Daphnia pulex</u>	1/quarter	24 Hr. Composite
	<u>Pimephales promelas</u>	1/quarter	24 Hr. Composite

**Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, LDEQ Option 1 Pretreatment Language will be used due to the lack of either an approved or required pretreatment program. Please see the attached Pretreatment Evaluation and Recommendation for more information.

**Pollution Prevention Requirements**

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report each year for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

**XIII      TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV      REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program", Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, City of Morgan City, Wastewater Treatment Plant, October 4, 2006.